25X1A5a1 [redacted]

~~SECRET~~

JULY 1956

OUTLINE SPECIFICATION

FOR

25X1A6a ADDITION TO STORAGE BUILDING [redacted]

PART 1. GENERAL INFORMATION

25X1A6a 1-A. LOCATION OF BUILDING SITE: [redacted] 25X1A
[redacted], ADJOINING PRESENT STORAGE BUILDING.

2-B. NAME OF CLIENT: U. S. GOVERNMENT

3-B. ACCOMPANYING DRAWINGS: PRELIMINARY DRAWINGS 1 TO 7 ENTITLED "ADDITION TO STORAGE BUILDING", DATED 30 JULY 1956.

PART 2. GENERAL DESCRIPTION OF THE WORK

2-A. GENERAL REQUIREMENTS:

(1) GENERAL SCOPE OF WORK: CONSTRUCTION OF A 2-STORY BUILDING WITH PARTIAL BASEMENT DESIGNED FOR USE AS STORAGE, AS INDICATED BY THE ACCOMPANYING DRAWINGS AND THIS SPECIFICATION.

(2) MECHANICAL AND ELECTRICAL SYSTEMS REQUIRED:

(A) HEATING SYSTEM
(B) MECHANICAL VENTILATION
(C) ELECTRICAL SYSTEM FOR POWER AND LIGHTING
(D) YEAR ROUND AIR CONDITIONING SYSTEM
(E) PLUMBING SYSTEM
(F) PRESERVATION SYSTEM

(3) FUTURE EXTENSIONS CONTEMPLATED:

(A) APPENDAGE TO SOUTHEAST PORTION OF NEW STRUCTURE.

(4) TYPE AND STANDARD OF CONSTRUCTION: "FIRE-RESISTIVE CONSTRUCTION - TYPE A", AS CLASSIFIED BY THE 1955 EDITION NATIONAL BUILDING CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS (HEREINAFTER REFERRED TO AS THE "NFBU CODE"), SECTION 702.

2-B. DATA FOR ESTIMATING: APPROXIMATE AREAS INVOLVED:

(1) AREA OF BUILDING SITE: 11,860 SQ. FT.

(2)

SPACES PROVIDED	FLOOR AREA (INCL. WALLS)
BASEMENT	6,100 SQ. FT.
1ST FLOOR	11,860 SQ. FT.
2ND FLOOR	11,860 SQ. FT.
TOTAL	29,820 SQ. FT.

(3) TOTAL CONTENT OF BUILDING: 393,080 CU. FT.

2-C. STRUCTURAL DESIGN DATA:

(1) SOIL: ASSUMED MAXIMUM SOIL PRESSURE, 5 KIPS.

(2) FLOOR AND ROOF LOADS (UNIFORMLY DISTRIBUTED LIVE-LOADS PER SQ. FT. OF FLOOR AREA):

1ST AND 2ND FLOORS, THROUGHOUT,	250 PSF
STAIRWAYS	100 PSF
ROOF	30 PSF

(3) CONCRETE STRENGTH REQUIRED: 3000 PSI UNDER STANDARD COMPRESSIVE TEST AT AGE OF 28 DAYS MINIMUM SLUMP 2"; MAXIMUM 4".

PART 3. SITE PREPARATION AND EXCAVATION

3-A. DEMOLITION - SCOPE: REMOVAL OF EXISTING ROADWAY ASPHALT SURFACING, ROADBED AND TREES AS INDICATED.

(1) DISPOSAL OF OLD MATERIALS: DEPOSITED ON GOVERNMENT PROPERTY WITHIN 500 FEET OF THE SITE OF THE WORK.

3-B. EXCAVATION:

(1) SCOPE: AS NECESSARY FOR BASEMENT, AND FOUNDATIONS INDICATED.

(2) Incidental Excavation: Adjacent loading-dock foundations and retaining wall.

3-C. Underpinning Requirements:

(1) Scope: Adequate support of all existing construction adjoining building site.

(2) Type of underpinning: Reinforced concrete throughout.

PART 4. FOUNDATIONS:

4-A. Footings and Walls - Type: Spread footings, throughout; all construction built of reinforced concrete. See ACI Code 318-51.

4-B. Incidental Work - Sub-grade drainage required: Open-joint tile or porous concrete pipe drain at outside of exterior foundation walls, around entire perimeter of structure.

PART 5. STRUCTURAL FRAMING

5-A. Framing Systems: Reinforced concrete columns with flat slab dropped panel floor construction. See "Floor and Roof Construction". See ACI Code 318-51.

PART 6. FLOOR AND ROOF CONSTRUCTION

6-A. Types of Construction. - See ACI Code 318-51.

(1) Basement Floor and First Floor below grade: Concrete sub-slabs placed over earth with metallic waterproof surfacing receiving structural concrete slabs reinforced with steel-wire fabric.

(2) First Floor over Basement and Second Floor: Reinforced flat slab design with dropped panels.

(3) Roof: Reinforced flat slab design with (or without) dropped panels.

6-B. Incidental Construction. - Roof Fill: Lightweight concrete made with Perlite aggregate.

(1) Load-dock floor: Reinforced concrete.

PART 7. EXTERIOR WALL CONSTRUCTION

7-A. TYPES OF CONSTRUCTION:

(1) WALLS BELOW GRADE: REINFORCED CONCRETE. SEE NBFU CODE, SECTION 913.

(2) WALLS ABOVE GRADE: CAVITY WALLS, NON-LOAD BEARING, OF 4" OUTER WYTHE AND 6" INNER WYTHE LEIGHTWEIGHT HOLLOW CONCRETE MASONRY UNITS. SEE NBFU CODE, SECTION 909.8.

7-B. INCIDENTAL WORK:

(1) FACING MATERIALS, ETC.: SEE "EXTERIOR FINISH."

(2) WATERPROOFING REQUIRED: METALLIC WATERPROOF SURFACING ON BELOW-GRADE BASEMENT AND FIRST FLOOR WALLS.

7-C. MISCELLANEOUS WORK. - CHIMNEY CONSTRUCTION: REINFORCED CONCRETE WITH HEAVY DUTY FIRE CLAY TILE FLUE LINING. SEE NBFU CODE, SECTION 1002.

PART 8. EXTERIOR FINISH

8-A. FACING MATERIALS: SCORE FINISH SURFACES AS INDICATED.

(1) EXPOSED CONCRETE WALLS: RUBBED FINISH.

(2) HOLLOW CONCRETE MASONRY WALLS: STUCCO FINISH.

8-B. INCIDENTAL CONSTRUCTION.-

(1) WINDOW SILLS - POURED-IN-PLACE REINFORCED CONCRETE. RUBBED FINISH.

PART 9. ROOFING WORK:

9-A. GENERAL REQUIREMENTS

(1) ROOF COVERING: 4-PLY BUILT-UP ROOFING WITH GRAVEL FINISH; CLASS "A" ACCORDING TO NBFU CODE, SECTION 802.

(2) ROOF FLASHING: 5-PLY, FABRIC-TYPE BASE FLASHING, LAPPED INTO ROOF COVERING AND TURNED UP ON VERTICAL SURFACES; 16 OZ. COPPER CAP FLASHING.

9-B. ROOF METALWORK REQUIRED. - FLASHING, GUTTERS, DOWNSPOUTS, GRAVEL STOPS, ALL OF SHEET COPPER. 16 OZ. EXPOSED WORK; 10 OZ. CONCEALED WORK.

PART 10. MISCELLANEOUS METAL WORK. - SUCH ITEMS SHALL INCLUDE NECESSARY ANCHORS, BOLTS, NAILS, AND OTHER ROUGH HARDWARE; ALSO INSERTS, HANGERS, WIRE TIES, FOR THE WORK OF MECHANICAL AND ELECTRICAL TRADES; CLEANOUT DOOR FOR CHIMNEY; WIRE MESH PARTITIONS; RAILINGS; THRESHOLDS; TOILET AND SHOWER COMPARTMENTS.

PART 11. INTERIOR WALLS AND PARTITIONS

11-A. TYPE OF CONSTRUCTION. - LIGHTWEIGHT HOLLOW CONCRETE MASONRY UNITS, OF THICKNESS INDICATED, NON-BEARING.

(1) WIRE MESH PARTITIONS: SEE "MISCELLANEOUS METAL WORK".

PART 12. WINDOWS

12-A. GENERAL REQUIREMENTS. - STOCK UNITS FABRICATED FROM ROLLED STEEL SECTIONS OF SECURITY DESIGN, EQUIPPED WITH HOPPER VENT AND SCREENS; ALL CONFORMING TO METAL WINDOW INSTITUTE STANDARDS.

12-B. INCIDENTAL REQUIREMENTS. -

(1) INSECT SCREENS: WINDOW MANUFACTURER'S STANDARD EQUIPMENT.

(2) SHOP FINISH REQUIRED: STANDARD BONDERIZING FINISH ON ALL FERROUS METAL SURFACES, FOLLOWED BY A PRIMING COAT OF IRON OXIDE PAINT.

(3) WINDOW STOOLS: EXPOSED CONSTRUCTION.

PART 13. DOORS & FRAMES

13-A. GENERAL REQUIREMENTS. -

(1) EXTERIOR DOORS: 1-3/4" WOOD FLUSH DESIGN, SOLID CORE, PAINT GRADE VENEERED DOORS.

(2) INTERIOR DOORS: 1-3/4" WOOD FLUSH DESIGN, SOLID CORE, PAINT GRADE VENEERED DOORS.

(3) LABELED DOORS: NBFU "B" LABEL DOORS.

(4) ROLLING OVERHEAD STEEL DOORS: FUSEABLE LINK CLOSER.

(4) FRAMES: 14 GAGE PRESSED STEEL FRAMES. NBFU LABEL WHERE LABELED DOORS ARE USED.

13-B. HARDWARE FOR DOORS:

(1) SCOPE: ALL ITEMS NECESSARY FOR THE SUITABLE EQUIPMENT AND CONVENIENT OPERATION OF THE BUILDING.

(2) QUALITY AND MATERIAL: CONFORM TO APPLICABLE FEDERAL SPECIFICATIONS. FINISH US 28.

13-C. SHOP FINISH REQUIRED: BONDERIZING AND PRIMING OF ALL FERROUS METAL EQUIPMENT, AS SPECIFIED FOR STEEL WINDOWS.

PART 14. INTERIOR FINISH

14-A. GENERAL REQUIREMENTS

(1) WALLS, CEILINGS: EXPOSED CONSTRUCTION PAINTED.

(2) FLOORS: ASPHALT TILE, EXCEPT MECHANICAL EQUIPMENT ROOM.

(3) BASES: RUBBER COVE-TYPE BASE IN OFFICE AND TOILETS, ONLY.

(4) CONCRETE FLOOR FINISH: MECHANICAL EQUIPMENT ROOM FLOOR STEEL TROWELED FINISH WITH HARDENER.

PART 15. THERMAL INSULATION - NONE

PART 16. EQUIPMENT & FURNISHINGS

16-A. METAL STORAGE BINS AND LOCKERS: NOT IN CONTRACT.

PART 17. MECHANICAL SYSTEMS

17-A. GENERAL REQUIREMENTS

(1) SCOPE OF WORK: SYSTEMS OF PLUMBING, AIR CONDITIONING AND HEATING, ELECTRIC WORK, AND OUTSIDE CHANGES TO SERVICES FOR THIS WORK.

(2) HEADROOM REQUIRED: 7½' MINIMUM.

17-B. PLUMBING WORK. - SYSTEMS REQUIRED: HOT AND COLD WATER DISTRIBUTION, FIRE PROTECTION, SANITARY, ROOF, FLOOR, AND FOOTING DRAINAGE AND PLUMBING FIXTURES.

(1) COLD WATER SERVICE: CONNECT TO PRESENT PNEUMATIC PRESSURE TANK.

(2) BRANCH LINE REQUIRED: VALVED BRANCHES FOR BOILER, WATER STORAGE HEATER, AIR CONDITIONING EQUIPMENT, AND PLUMBING FIXTURES.

(3) FIRE PROTECTION SYSTEM: TWO INCH STANDPIPES SUPPLYING 75 FEET 1-1/2" HOSE ON RACKS FOR FIRST AID. TWO NEW STANDPIPES REQUIRED. EXTEND FROM PRESENT SYSTEM.

(4) HOT WATER SERVICE: NEW STEAM SUPPLIED GENERATOR FOR USE WITH BOILER. FOR SUMMER USE, 60 KW ELECTRIC HEATER CONNECTED TO TANK THROUGH A CIRCULATOR. CAPACITY OF STORAGE TANK 200 GALLONS. RECOVERY CAPACITY OF HEATING ELEMENTS 200 GALLONS PER HOUR THROUGH 100° F. NEW HOT WATER LINES WILL BE RUN TO CONNECT TO EXISTING LINES IN PRESENT MECHANICAL EQUIPMENT ROOM. TANK WILL BE COPPER SILICON ALLOY.

(5) SANITARY SYSTEM: A NEW SANITARY CONNECTION TO THE BUILDING WILL BE PROVIDED AS SHOWN ON SITE PLAN.

(6) ROOF AND FLOOR DRAINAGE: EXTERIOR DOWNSPOUTS WILL BE COLLECTED AND CARRIED TO STORM SEWER. BUCKET TYPE FLOOR DRAINS WILL BE PROVIDED FOR BOILER AND EQUIPMENT ROOMS. PRESENT STORM SEWER WILL BE EXTENDED AND NEW HEADWALL WILL BE PROVIDED AS SHOWN. AREA DRAINS WILL BE NO. 224.

(7) FOOTING DRAINAGE: AN INSTALLATION OF OPEN JOINT DRAINAGE TILE PLACED ON EXTERIOR SIDE OF THE BOTTOM OF FOUNDATION WALLS COVERED WITH A POROUS FILL GRADED TO DISCHARGE TO STORM SEWER.

(8) PLUMBING FIXTURES: WATER CLOSETS OUTFIT VW-16 FIG. 10:06 WWP-541B, LAVATORIES OUTFIT EL-20B FIG. 11:02, SHOWERS OUTFIT SCC FIG. 15:01.

(9) PIPE COVERING: ALL WATER PIPING COVERED WITH 1" THICK FIBRE GLASS; GENERATOR AND BOILER 1-1/2" 85% MAGNESIA BLOCKS, CEMENT FINISHED.

(10) SITE WORK: REROUTE 6" AND 2" UNDERGROUND WATER LINES, STORM AND SANITARY LINES TO CLEAR ADDITION AND FUTURE ADDITION AS SHOWN ON SITE PLAN.

17-C. HEATING WORK. - SYSTEMS IN GENERAL: PROVIDE NEW BOILER AND NO. 5 OIL BURNER WITH NEW 10,000 GALLON OIL TANK. REMOVE EXISTING BOILER, OIL BURNER, AND CONDENSATE PUMP. INSTALL NEW CONDENSATE PUMP IN NEW MECHANICAL EQUIPMENT ROOM. EXTEND STEAM AND RETURN LINES FROM BOILER AND PUMP TO CONNECT TO OIL LINES IN OLD MECHANICAL EQUIPMENT SPACE. REMOVE EXISTING 2000 GALLON OIL TANK. ALL REMOVED EQUIPMENT SHALL BE DELIVERED TO THE CONTRACTING OFFICER AT A DESIGNATED POINT ON THE SITE. CONNECT STEAM AND RETURN LINES TO ALL AIR HANDLING UNITS. ALL PIPING SHALL BE COVERED WITH STANDARD THICKNESS 85% MAGNESIA. BOILER COVERED WITH 1-1/2" MAGNESIA BLOCKS, CEMENT FINISHED.

17-D. AIR CONDITIONING. - GENERAL REQUIREMENTS:

(1) SPACE TO BE CONDITIONED: ENTIRE BUILDING INCLUDING ENTIRE NEW BASEMENT.

(2) DESIGN CONDITIONS: OUTSIDE 95° F. AND 78° F.W.B. IN SUMMER AND 0° F. IN WINTER. INSIDE 80° F.D.B. AND 50% RELATIVE HUMIDITY IN SUMMER. IN WINTER, STORAGE AREAS 72° F. AND 50% HUMIDITY; OFFICE AREAS 72°F. BUT NO HUMIDITY CONTROL. OUTSIDE AIR APPROXIMATELY 20%.

(3) MECHANICAL PLANT: 75 TON REFRIGERATION TO COOL CHILLED WATER TO APPROXIMATELY 47° F. TWO BUILT UP AIR HANDLING UNITS WITH SPRAY TYPE AND COIL WASHERS, FILTERS, HEATERS, FANS, ETC. FOR COMPLETE SUMMER-WINTER CONTROL OF TEMPERATURE AND HUMIDITY. DEW POINT CONTROL BOTH SUMMER AND WINTER TO ACCURATELY CONTROL CONDITIONS. THREE TON SELF-CONTAINED PACKAGE UNITS FOR ADDITIONAL OFFICE AREAS. COOLING TOWER TO BE LOCATED OUTSIDE ON CONCRETE PLATFORM ON GROUND AS INDICATED ON MECHANICAL EQUIPMENT PLOT PLAN.

(4) RELOCATION OF EQUIPMENT: EXISTING 7-1/2 TON PACKAGE UNIT WILL BE RELOCATED TO NEW MECHANICAL EQUIPMENT ROOM IF NECESSARY. FIRST ATTEMPT WILL BE MADE TO QUIET UNIT. 30 HP COMPRESSOR UNIT WILL BE SPRING ISOLATED TO REDUCE NOISE.

PART 18. ELECTRICAL SYSTEM

18-A. GENERAL REQUIREMENTS.- SCOPE OF WORK: SYSTEM FOR LIGHT AND POWER INCLUDING FIXTURES.

18-B. POWER AND LIGHTING SYSTEM.-

(1) PRIMARY SERVICE: 4160/2400 VOLTS

(2) SECONDARY SERVICE: 120/208 VOLTS, 4-WIRE, 3 PHASE.

(3) TYPE OF WIRING: RUN IN METAL RACEWAYS THROUGHOUT.

(4) LIGHTING FIXTURES: INCANDESCENT IN STORAGE AREAS, FLUORESCENT IN PRESERVATION AND OFFICE AREAS.

(5) MISCELLANEOUS SERVICES: EXTEND TELEPHONE, BURGELAR AND FIRE ALARM SYSTEMS.

(6) EXTERIOR WORK: REMOVE EXISTING 112 KVA, 3 PHASE TRANSFORMER AND CONCRETE PLATFORM AND STEEL FENCE. INSTALL THREE NEW SINGLE PHASE 100 KVA TRANSFORMERS ON NEW CONCRETE PLATFORM WITH STEEL FENCE WHERE SHOWN. NEW UNDERGROUND SERVICE FROM EXISTING POLE. REMOVE TWO POLES ON SITE OF EXTENSION, AND REMOVE ALL WIRING BACK TO POLE SUPPLYING NEW TRANSFORMERS. REPLACE ONE OF THE REMOVED POLES IN SURFACED AREA AS SHOWN. ABANDON UNDERGROUND JUNCTION BOX UNDER SITE OF EXTENSION. RELOCATE EXISTING UNDERGROUND EMERGENCY LOW VOLTAGE FEEDER TO NEW UNDERGROUND JUNCTION BOX LOCATED WHERE SHOWN. INSTALL NEW 500 MCM TRENCHLAY CABLE TO RELOCATED POLE AND CONNECT TO OVERHEAD EXITING LINE. INSTALL NEW 500 MCM TRENCHLAY CABLE FROM EMERGENCY GENERATOR HOUSE TO STORAGE BUILDING. EXTEND BURGLAR AND FIRE ALARM SERVICES FROM 4160 VOLT SERVICE POLE TO SERVICE BUILDING.

PART 19. FIELD PAINTING & FINISHING

19-A. SCOPE OF WORK REQUIRED. -

(1) PROTECTIVE: SURFACE OF UNFINISHED MATERIALS AND EQUIPMENT REQUIRING PROTECTION.

(2) DECORATIVE: EXPOSED SURFACES OF UNFINISHED MATERIALS, SUCH AS METALS, (EXCEPT COPPER GUTTERS AND DOWNSPOUTS) INTERIOR CONCRETE SURFACES, INTERIOR MASONRY SURFACES, DOORS AND FRAMES, WINDOWS.